IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

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Art Unit: Unassigned

International Application
No. PCT/US00/25092

Examiner: Unassigned

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For: METHODS AND SYSTEMS FOR COUNTING PARTICLES AND SENSING WATER

AMENDMENTS TO CLAIMS
MADE VIA PRELIMINARY AMENDMENT

Amendments to existing claims:

3. The system of claim 1 ~~or 2~~ wherein the water sensor is disposed downstream of the optical particle counter.

4. The system of claim 1 ~~or 2~~ wherein the water sensor is disposed upstream of the optical particle counter.

5. The system of claim 1 ~~or 2~~ wherein the water sensor and the optical particle counter are disposed in parallel in the non-aqueous liquid.

6. The system of claim 1 ~~any preceding claim~~ wherein the water sensor generates a signal indicative of relative saturation water content.

7. The system of claim 1 ~~any of claims 1-5~~ wherein the water sensor generates a signal indicative of absolute water content.

10. The system of claim 1 ~~any preceding claim~~ wherein the optical particle counter generates a signal indicative of the number of particles in the non-aqueous liquid.

12. The system of claim 1 ~~any preceding claim~~ further comprising a processing circuit operatively coupled to at least one of the water sensor and the optical particle counter.

14. The system of claim 12 ~~or 13~~ wherein the processing circuit receives a signal indicative of the particle count from the optical particle counter.

15. The system of claim 12 ~~any of claim 12-14~~ wherein the processing circuit ~~includes a subcircuit which~~ signals implications of the water content on the particle count.

16. The system of claim 15 wherein the ~~subcircuit~~ processing circuit signals implications of the water content on the particle count in accordance with one or more threshold values related to the water content.

18. The system of claim ~~17~~ 15 wherein the ~~display~~ processing circuit provides an indication of the particle count and an indication of the reliability of the particle count in accordance with the water content.

19. The system of claim 18 wherein the ~~display~~ processing circuit provides an indication of the reliability of the particle count in accordance with one or more threshold values related to the water content.

21. The system of claim 12 ~~any of claims 12-20~~ further comprising a valve arrangement coupled to the processing circuit.

23. The system of claim 22 ~~any of claims 21 and 22~~ further comprising a treatment unit coupled to the valve arrangement and arranged to decrease the water content in the non-aqueous liquid.

25. The system of claim 21 ~~any of claims 21-24~~ further comprising a bypass line coupled to the valve arrangement and arranged to bypass the optical particle counter.

26. The system of claim 1 ~~any of the preceding claims~~ wherein the water sensor and the optical particle counter comprise an integral unit.

33. The method claim 27 ~~31 or 32~~ further comprising ~~displaying~~ providing an indication of the reliability of the ~~displayed~~ number of particles counted by the optical particle counter.

40. The method of claim 37 ~~any of claims 37-39~~ wherein directing the non-aqueous liquid away from the optical particle counter includes bypassing the optical particle counter.

41. The method of claim 37 ~~any of claims 37-40~~ wherein directing the non-aqueous liquid away from the optical particle counter includes directing the non-aqueous liquid into a particulate indicator.

44. The method of claim 37 ~~any of claims 27-43~~ wherein sensing an indication of the water content includes sensing an indication of the relative saturation water content of the non-aqueous liquid.

45. The method of claim 37 ~~any of claims 27-43~~ wherein sensing an indication of the water content includes sensing an indication of the absolute water content of the non-aqueous liquid.